

PETROLEUM WATCH
Transportation Energy Office
Fuels and Transportation Division
California Energy Commission

November 19, 2012

Summary

As of November 12, retail regular-grade gasoline prices in California fell by 76 cents since the October *Petroleum Watch* to \$3.86 per gallon, 81 cents lower than California's all-time record high of \$4.67 per gallon that was set on October 8, following the unplanned Torrance refinery outage. Retail diesel prices fell by a more modest 28 cents from last month to \$4.16 per gallon.

California spot wholesale gasoline prices were \$2.78 on November 9, a decrease of 62 cents from a month ago and 19 cents lower than a year ago. From the record high price in early October, wholesale prices have fallen \$1.46 to \$2.78. Wholesale diesel prices fell by 20 cents from a month ago to \$3.14, a smaller decrease compared to gasoline, although diesel prices didn't spike as did gasoline prices.

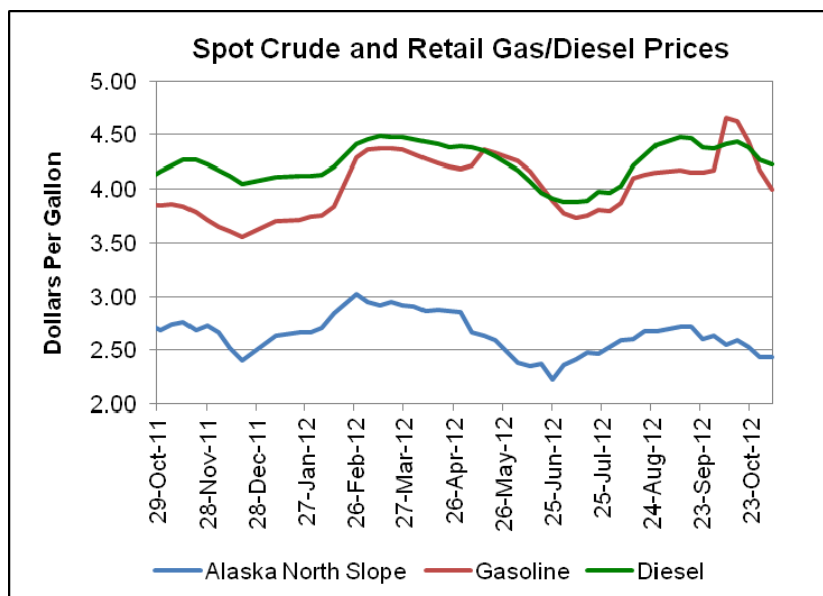
California-compliant gasoline production and inventories fell by 3.2 percent and 2.9 percent in the past week, respectively. California-compliant diesel production decreased by 15.6 percent, while inventories increased by 11.9 percent in the past week. A month after the refinery outage, gasoline and diesel inventories have increased and are at normal levels.

United States crude oil prices have fallen over the past month along with other international benchmark oil prices. Brent oil prices have fallen to \$111.07 per barrel, while West Texas Intermediate (WTI) prices have fallen to \$88.62 per barrel. As of November 6, Alaska North Slope (ANS) crude oil prices fell to \$105.46, \$2.79 less than a month ago.

Comparisons of Diesel, Gasoline, and Crude Oil Price Changes

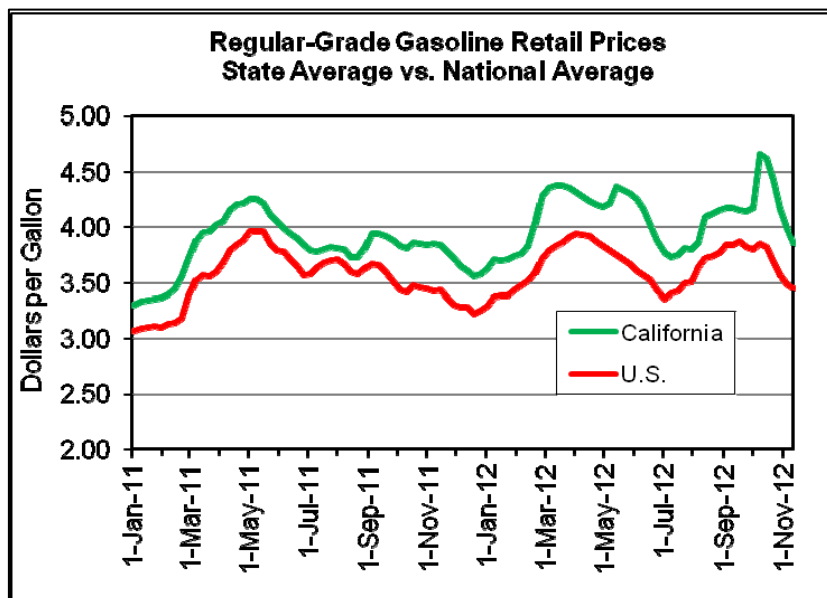
Gasoline prices have fallen substantially as October's refinery outage has been resolved, while crude oil prices and diesel prices have declined gradually. As of November 12, ANS prices were \$2.49 per gallon, gasoline prices were \$3.86 per gallon, and diesel prices were \$4.16 per gallon.

Gasoline, ANS, and diesel prices are 6 cents, 80 cents, and 25 cents per gallon lower, respectively, compared to October's *Petroleum Watch*.

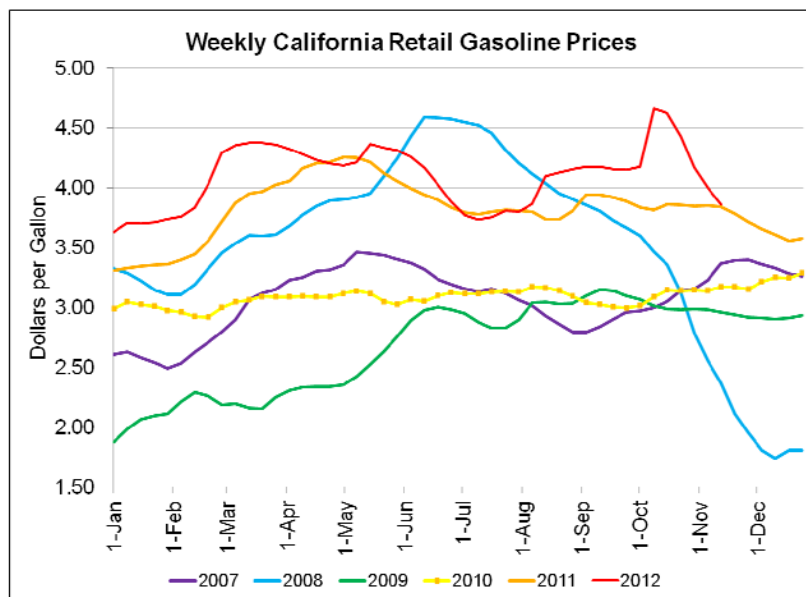


Retail Prices

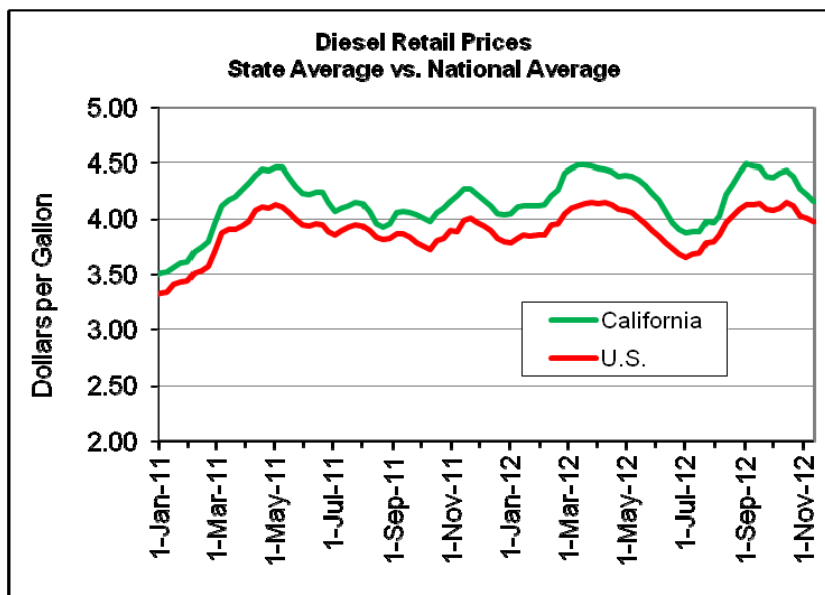
The average California **retail price for regular-grade gasoline** decreased 76 cents over the past month, falling to \$3.86 per gallon, 81 cents lower than the all time of \$4.67 in early October.¹ In addition, average U.S. retail gasoline prices fell 37 cents from a month ago to \$3.45. Average U.S. gasoline prices are 1 cent more than a year ago. The difference between California and U.S. retail gasoline prices fell from 80 cents to 41 cents over the past month, primarily due to California price decreases following the price spike in California. Prices have fallen as October's refinery outage has been resolved and the transition to California's winter blend gasoline has been completed; both have helped increase gasoline supplies.



California retail gasoline prices have fallen from all time highs and are now close to where prices were at this time last year. As of this *Petroleum Watch*, 2012 annual California prices average \$4.10.

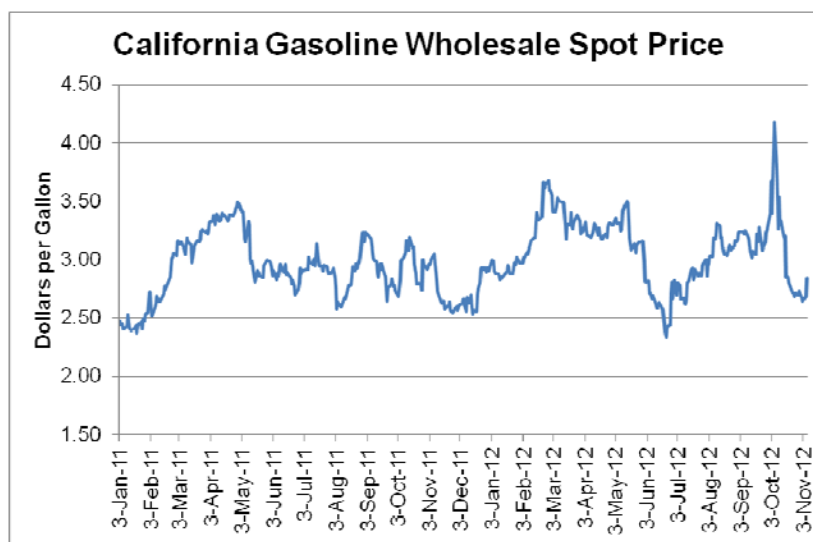


The average California **retail diesel price** fell 28 cents over the past month to \$4.16 per gallon. The average U.S. retail diesel price fell 17 cents over the past month to \$3.98 per gallon. As a result, the premium for California diesel over U.S. diesel prices decreased from 29 cents to 18 cents over the past month. California diesel prices are 11 cents lower than a year ago, and U.S. diesel prices are 1 cent lower than a year ago. California diesel prices are now 30 cents higher than gasoline prices, due to larger declines in gasoline prices than diesel prices.



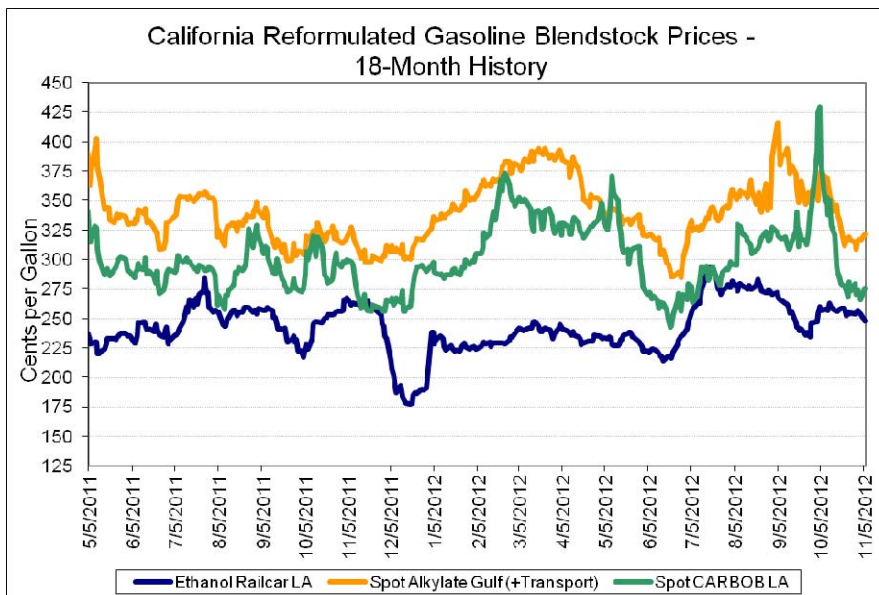
Wholesale Gasoline and Blendstock Prices on November 9, 2012

The wholesale gasoline price in California has seen a significant drop over the past month following the resolution of the October refinery outage in Torrance and the switchover to winter-blend gasoline. California spot wholesale gasoline prices for regular-grade reformulated blendstock for oxygenate blending (RBOB) stood at \$2.78 on November 9, down a full 62 cents over the month and 19 cents below this time last year. Prices in New York are down 13 cents over the month but up the same amount over the year.

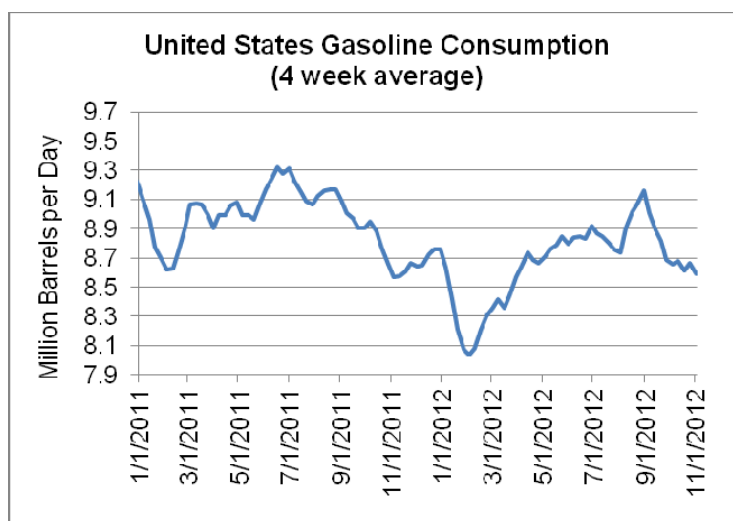


After spending the last few months well over last year's price, diesel prices in California have seen some relief. Wholesale diesel prices have fallen over 20 cents this past month to \$3.14, down 36 cents from this time last year. New York diesel posted a 15-cent decline over the past month to \$3.18, up 2 cents from last year.

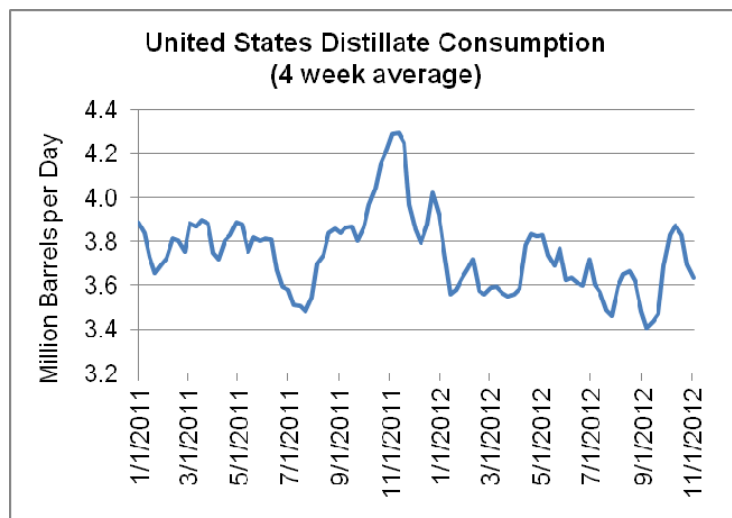
The average representative estimated cost of **fuel ethanol** to California refiners and marketers fell 9 cents to \$2.48 per gallon as of November 5, 2012.²



The EIA's weekly report for the week ending November 2 shows the four-week average for gasoline consumption at 8.6 million gallons, which is a 0.2 percent increase from a year ago. Compared to a month ago, consumption is 3.3 percent lower.

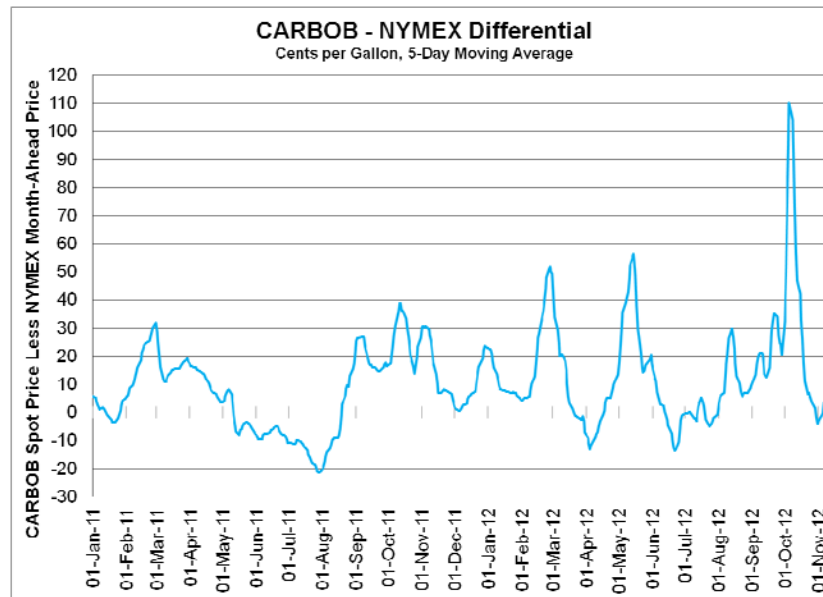


Likewise, the EIA's weekly consumption data shows the four-week average for diesel consumption at 3.6 million gallons, which is a 15.3 percent decrease from a year ago. Compared to a month ago, consumption is 6.1 percent lower. Both gasoline and diesel consumption were possibly impacted by the lingering effects of hurricane Sandy.

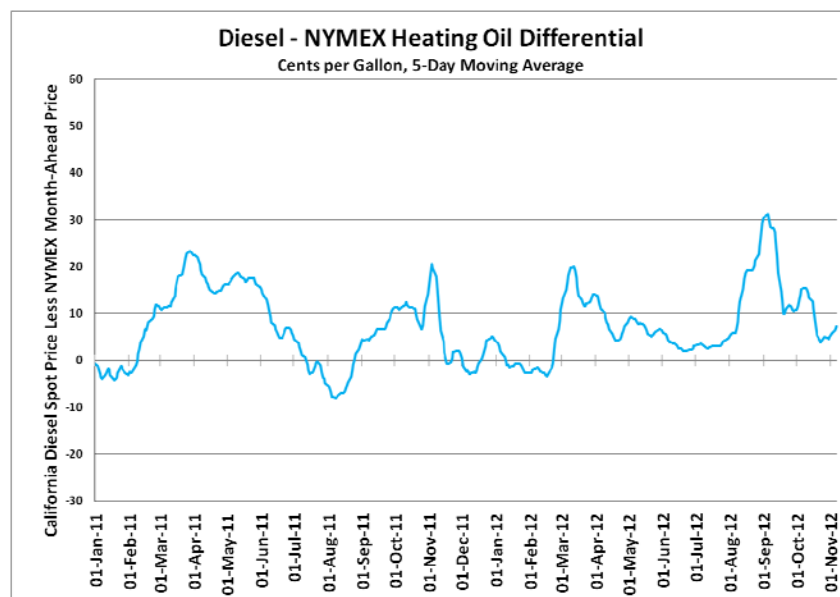


Futures-Spot Market Spread³

As of November 6, the spot market price for **California gasoline** was at a 3.5-cent premium to the New York Mercantile Exchange (NYMEX) one-month-ahead futures price, using five-day moving averages. The differential has dropped from \$1.10, seen on October 5, to 4 cents below the NYMEX on October 31, primarily due to price declines in the California gasoline spot market. The differential is now below the 2009-2011 average of 12 cents, indicating that supplies in the California market have returned to normal levels.

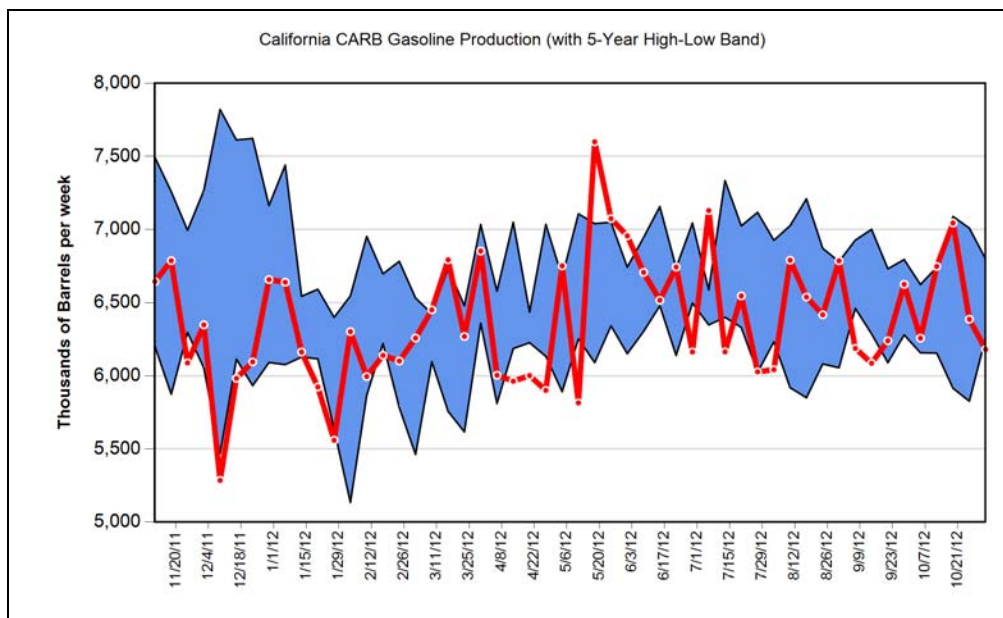


As of November 6, **California spot diesel** sold at a premium of 7 cents to the NYMEX heating oil one-month ahead futures price, using five-day moving averages, down from 13 cents in the October *Petroleum Watch* and slightly above the 2009-2011 average premium of 6 cents. This indicates that the diesel market is adequately supplied.

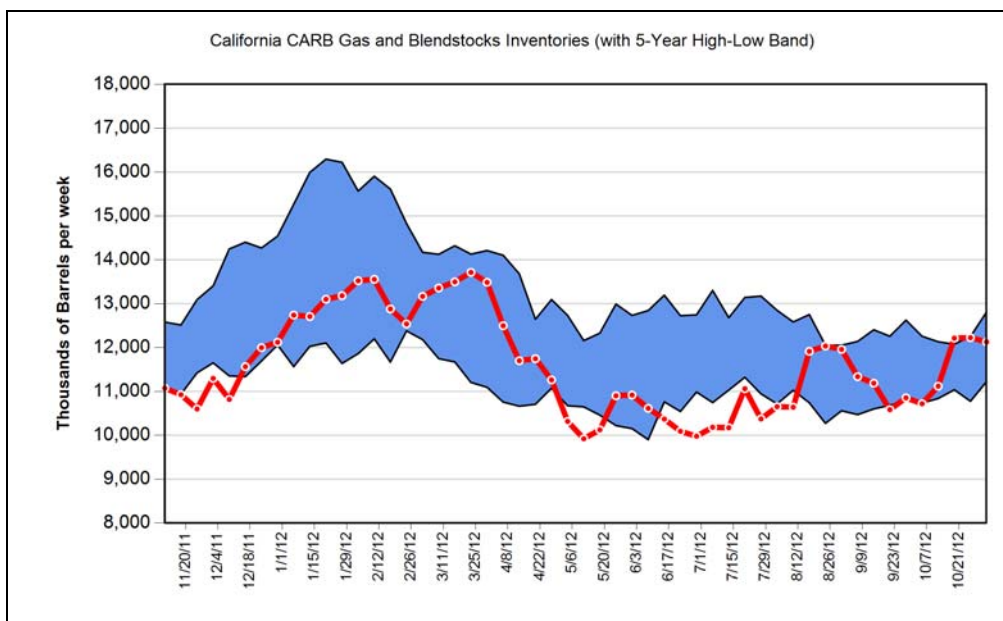


Refinery Production and Inventories

Reformulated gasoline production in California for the week ending November 2 decreased 3.2 percent from the previous week to 6.1 million barrels, falling to the bottom of the five-year range.⁴

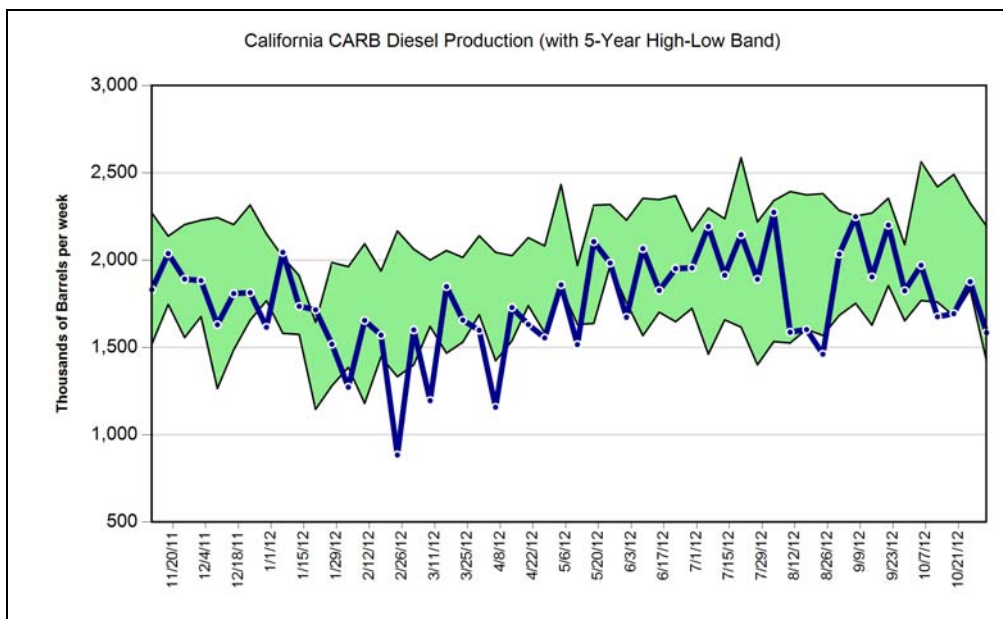


California **reformulated gasoline inventories** decreased 2.9 percent from the past week, while gasoline blendstock inventories increased 0.9 percent. California's combined inventories of reformulated gasoline and gasoline blendstocks showed a very slight drop from the previous week to 12.1 million barrels. Inventories have increased since October's *Petroleum Watch* and are now at the top of the five-year range.

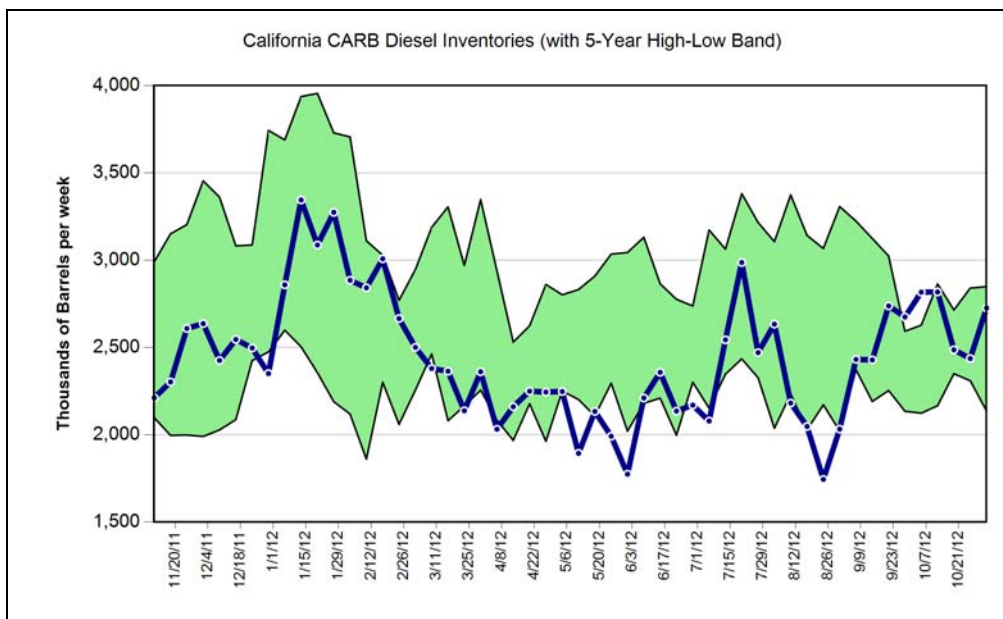


Gasoline prices have declined in part due to the increase in inventories of gasoline and blendstocks, which are 0.9 percent lower than this time last year in California and 2.4 percent higher on the West Coast than this time last year.

California-compliant **ultra-low-sulfur diesel fuel (CARB diesel) production**⁵ was 1.6 million barrels during the week ending November 2, a decrease of 15.6 percent from the previous week, falling to the bottom of the five-year range.



Inventories of CARB diesel in California increased 11.9 percent from the previous week to 2.7 million barrels, rising to the upper end of the five-year range.



On the West Coast, inventories decreased by 49,000 barrels from last week but are 1.5 million barrels higher than last year. Compared to this time last year, California distillate inventories are 14.1 percent greater. U.S. distillate inventories as of November 2 rose to 118.0 million barrels, 0.1 million barrels more than the previous week. However, inventories fell 0.5 million and 1.1 million barrels on the East and Gulf Coasts, respectively.

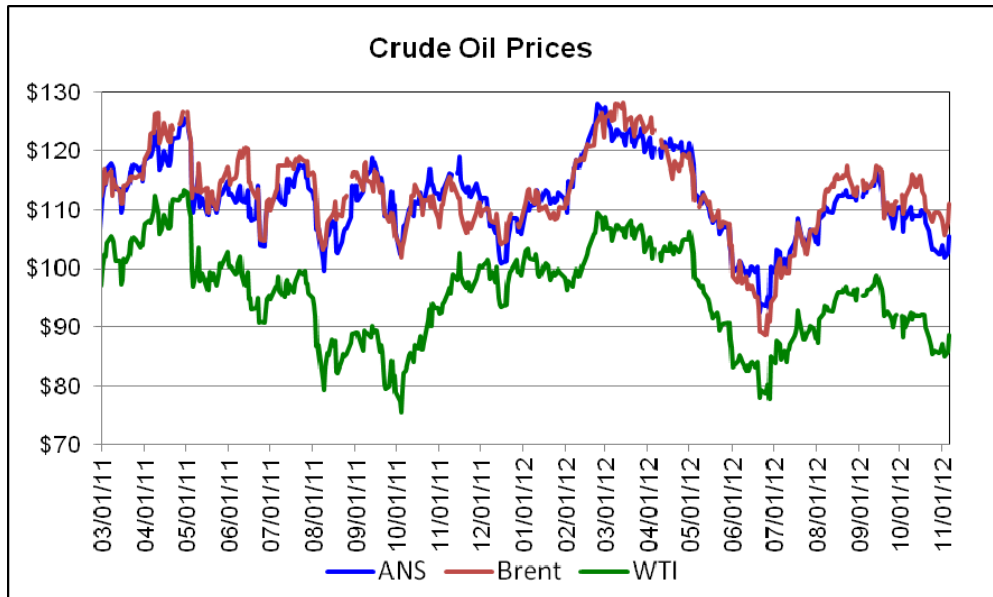
Crude Oil Prices and Associated Factors

West Coast prices for ANS crude oil, a refinery feedstock for California, fell to \$105.46 as of November 6. ANS crude prices have fallen \$2.79 since the previous *Petroleum Watch* and are \$10.84 less than a year ago.⁶ Over the past month, increasing inventory levels and decreases in the S&P 500 have pushed United States oil prices down.⁷

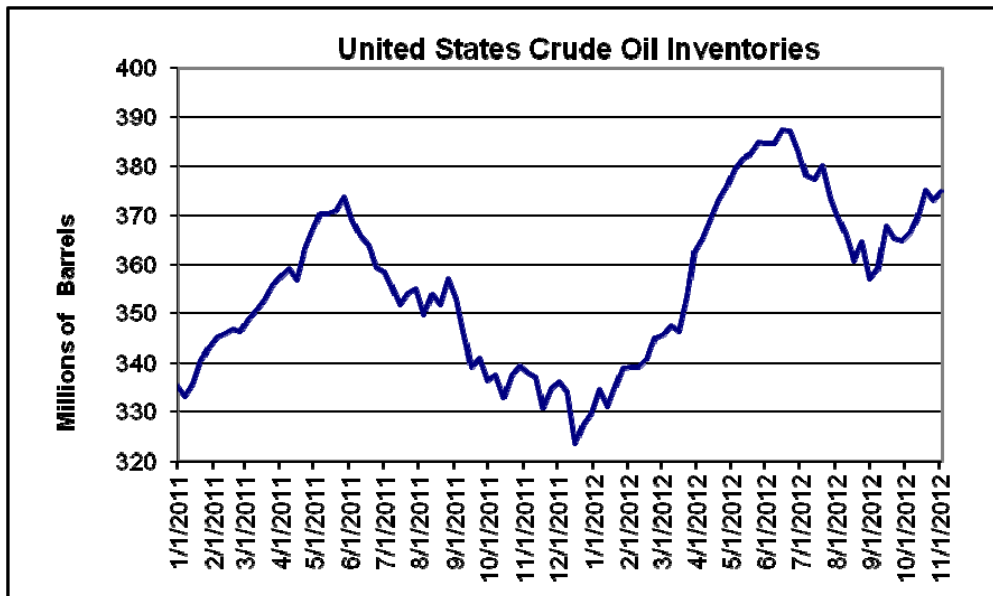
Recent Trends in Crude Oil Prices

	October 2012	November 2012	Change from previous Month	Directional Contributing Factor		
				Upward	Downward	Unchanged
ANS Crude Oil Price (U.S. Dollars /Barrel)	\$108.25	\$105.46	Down 2.6%			
Europe Brent Crude Oil Price (U.S. Dollars/Barrel)	\$116.11	\$111.07	Down 4.3%			
West Texas Intermediate, Cushing Oil Price (U.S. Dollars/Barrel)	\$91.24	\$88.71	Down 2.8%			
U.S. Crude Oil Inventories (MM Barrels)	366.37	374.85	Up 2.3%		✓	
S&P 500	1,433	1,395	Down 2.7%		✓	
EURO STOXX 50 Price	2,470	2,479	Up 0.4%			✓
Total Dollar Index	80	81	Up 1.0%		✓	
Exchange rate: Dollars per Euro	1.29	1.28	Down 0.8%		✓	
European Debt Problems						✓
Disruption in Oil Exports						✓

The spread between West Texas Intermediate crude oil prices and Brent crude oil contracts continues to widen, averaging \$22.22 since the last *Petroleum Watch*. West Texas Intermediate-NYMEX futures traded at \$88.71 per barrel as of November 6, \$16.75 less than ANS crude oil.



U.S. crude oil inventories have increased slightly over the past week and have also increased over the past month. As of November 2, U.S. commercial crude oil inventories rose by 1.8 million barrels from the previous week to 374.8 million barrels. Crude oil stocks are 36.8 million barrels more than a year ago and 42.3 million barrels more than the five-year average for this date. California crude oil stocks rose 3.5 percent from the previous week to 16.3 million barrels and are 0.3 percent less than a year ago.



¹ Retail gasoline and diesel prices and U.S. crude oil and product inventory estimates are from the Energy Information Administration of the U.S. Department of Energy.

² Ethanol railcar prices are from *Platts Oilgram* and are average prices for prompt Southern California shipments minus a 45¢/gal federal excise tax credit for 2009 through 2011 prices and a 51¢/gal federal excise tax credit for prices prior to 2009.

The federal excise tax credit expired at the end of 2011. California alkylate prices are also calculated from Platts Oilgram and include a 20¢/gal transportation and distribution cost from Gulf Coast to California. Spot wholesale prices for regular-grade California reformulated gasoline blendstock for oxygenate blending (CARBOB) are from Oil Price Information Service.

³ A higher spread between the state's spot fuel prices and the New York Mercantile Exchange (NYMEX) futures price indicates supplies are tighter in California, and a lower spread indicates the market is relatively well-supplied compared to the rest of the country. The NYMEX futures price reflects the national market, while California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB) is a gasoline blend unique to California and is usually sold at a premium to the NYMEX.

⁴ California refinery production and inventory information is from the Petroleum Industry Information Reporting Act (PIIRA) database maintained by the California Energy Commission.

⁵ Staff has discontinued the reporting of combined CARB and EPA diesel production and inventories and will report only CARB diesel as of December 2009. EPA diesel is primarily for export from California.

⁶ Alaska North Slope (ANS) crude oil prices are from *The Wall Street Journal*. Brent and West Texas Intermediate (WTI) crude oil prices are from the Energy Information Administration.

⁷ ANS crude oil price changes are influenced by inventory levels, refinery capacity, domestic and international economic conditions, currency exchange rates, perceived risks to global supply such as unrest in the Middle East, and near-term price trends as indicated by the futures market for crude oil